No. 7900085

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Rice Researchers, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

RICE

'RRI-105'

PLANT VARIETY PROTECTION OFFICE · GRAIN DIVISION · AGRICULTURAL MARKETING SERVICE · DEPARTMENT OF AGRICULTURE

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 26th *day of* March *in the year of our Lord one thousand nine hundred and* eighty-one.

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

FORM APPROVED
OMB NO. 40-R3822

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME	FOR OFFICIAL USE ONLY
RRI-105	RRI-105 8 pp 3/4/81	PV NUMBER 7900085

2. KIND NAME	3. GENUS AND SPECIES NAME	FILING DATE	TIME
Rice	Oryza sativa	6-4-79	3:10 A.M. P.M.
4. FAMILY NAME (BOTANICAL)	**5. DATE OF DETERMINATION**	**FEE RECEIVED**	**DATE**
Gramineae	Fall 1977	$500.00 $250.00	6-4-79 2/18/81

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Rice Researchers, Inc.	Route 1, Box 398 Glenn, California 95943	916-891-1355

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	California--1968	1968

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS:

A. H. Williams/Lorenzo Pope, Route 1, Box 398, Glenn, CA 95943

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Novelty Statement.
- [X] 13C. Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
- [X] 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [X] NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED?
[X] YES [ ] NO	[ ] FOUNDATION [ ] REGISTERED [X] CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? [X] YES [ ] NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

21 Dec 1979
(DATE)

A. H. Williams
(SIGNATURE OF APPLICANT)

21 Dec 1979
(DATE)

C Lorenzo Pope
(SIGNATURE OF APPLICANT)

FORM GR-470 (1-78)

RRI-105

Exhibit A

Origin and Breeding History

RRI-105 originated from a hand pollinated cross between Ampec and Taichung Native I. The F_1 was then crossed with PI-162221 (Huang-To-Do) to introduce early glutinous genes.

The parent, Ampec, is a well proven standard California variety with excellent quality. However, this variety is tall (generally greater than 112 cm) and late in maturity (generally more than 107 days to 50% heading).

Taichung Native I is a high yielding dwarf variety that has been used primarily for its dwarf genes.

Huang-To-Do (PI-162221) is a very early (75 days to 50% heading) glutinous variety. This variety was used for its early genes.

RRI-105 was made up from homogenic lines that were uniform in plant type, height, and maturity. Variants in height and maturity would not be expected.

These homogenic dwarf, glutinous lines were selected and tested for amylopectin quality. Several pure line F_6 selections, all nearly the same height and plant type were grouped to make the variety.

RRI-105 (Application #7900085)

Exhibit B

Data Indicative of Novelty

Since Ampec is the only commercially released sweet rice variety grown on substancial acreage in California, RRI-105 is contrasted morphologically against this variety.

RRI-105 most closely resembles Ampec in paddy, brown and milled kernel characteristics. Both have glutinous endosperm which is acceptable for commercial rice flour. However, RRI-105 is shorter (88 vs 112 cm), has light green instead of dark green leaves, flowers much earlier (50% Heading is 84 days instead of 107 days) and matures more rapidly (130 vs 160 days).

FORM APPROVED. OMB NO. 40-R371-2

FORM GR-470-17
(1-2-73)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Rice)

OBJECTIVE DESCRIPTION OF VARIETY

RICE (*ORYZA SATIVA*)

REFERENCES: *See Reverse.*

NAME OF APPLICANT(S)

RICE RESEARCHERS, INC.

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)

Route 1, Box 398
Glenn, California 95943

FOR OFFICIAL USE ONLY

PVPO NUMBER 7900085

VARIETY NAME OR TEMPORARY DESIGNATION

RRI-105

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. MATURITY (Seeding to 50% Heading):

LOCATION Glenn Co., Calif. AVERAGE DATE SEEDED 1 May, 1978

[1] Season: 1 = VERY EARLY (85 days or less) 2 = EARLY (86 - 100) 3 = MIDSEASON (101 - 115) 4 = LATE (115 - or more)

[0][8][4] NUMBER OF DAYS

[2][9] NO. OF DAYS EARLIER THAN . . . [5]

[ ][ ] NO. OF DAYS LATER THAN . . . . [ ]

1 = BELLE PATNA 2 = BLUEBELLE 3 = NATO 4 = STARBONNET 5 = CALROSE 6 = REXORO

2. PLANT HABIT (Tiller Angle from Perpendicular at the Early Jointing Stage):

[3] 1 = SPREADING (more than 60°) 2 = INTERMEDIATE 3 = ERECT (less than 30°)

3. STEMS (Full Heading):

[0][8][8] CM. TALL (Soil level to tip of extended panicle on main culm)

[4][1] CM. SHORTER THAN . . . . . [5]

[ ][ ] CM. TALLER THAN. . . . . [ ]

1 = BELLE PATNA 2 = BLUEBELLE 3 = NATO 4 = STARBONNET 5 = CALROSE 6 = REXORO

[0][4] NUMBER OF NODES

[9] INTERNODE COLOR (Outside)

[9] SEPTUM COLOR (Inside Node)

1 = LIGHT YELLOW 2 = CREAM 3 = GOLD 4 = GREEN 5 = REDDISH 6 = LIGHT PURPLE 7 = PURPLE 8 = DARK PURPLE 9 = OTHER (Specify) light yellow green

[2] Tillering Ability (number of culms): 1 = 10 OR LESS (Belle Patna) 2 = 11 - 20 (Bluebonnet) 3 = ABOVE 20 (Century Patna)

[2] Strength: 1 = STURDY (Starbonnet) 2 = INTERMEDIATE (Belle Patna) 3 = WEAK

4. LEAF BLADE (First Leaf Below Flag Leaf):

[3][3] CM. LENGTH [1][0] MM. WIDTH

[2] Color: 1 = PALE GREEN (Starbonnet) 2 = MEDIUM GREEN (Bluebelle) 3 = DARK GREEN (Calrose) 4 = PURPLE 5 = RED 6 = OTHER (Specify) _____

[1] Pubescence: 1 = GLABROUS 2 = INTERMEDIATE 3 = PUBESCENT

[2] Flag Leaf Angle: 1 = HORIZONAL 2 = ASCENDING 3 = ERECT

[2][5] CM. LENGTH OF FLAG LEAF (Booting Stage)

[1][2] MM. WIDTH (widest point) OF FLAG LEAF (Booting Stage)

5. LEAF SHEATH (First Leaf Below Flag Leaf):

[2] Ligule Length: 1 = NONE 2 = 20 MM. OR LESS 3 = 21 - 34 MM. 4 = MORE THAN 34 MM.

Color:

[2] SHEATH (Outside) [1] COLLAR

[1] SHEATH (Inside) [5] LIGULE

[2] SHEATH (Seedling) [5] AURICLE

1 = COLORLESS 2 = GREEN 3 = RED 4 = PURPLE 5 = OTHER (Specify) light yellow green

14. PYRICULARIA ORYZAE RESISTANCE (International races found under References, items 2 and 4 below.) 7900085
(0 = Not Tested; 1 = Susceptible; 2 = Resistant):

GROUP	IA	IB				IC			ID				IE		IG		IH				
NUMBER	109	1	33	49	54	1	17	19	1	8	13	14	1	3	1	2	1				
RESISTANCE																					

15. DISEASE RESISTANCE (0 = Not Tested; 1 = Susceptible; 2 = Resistant):

[0] CERCOSPORA ORYZAE	[0] ENTYLOMA ORYZAE	[0] FUSARIUM PANICLE BLIGHT
[1] HELMINTHOSPORIUM ORYZAE	[0] HOJA BLANCA VIRUS	[0] LEPTOSPHAERIA SALVINII
[0] PYTHIUM SEEDLING BLIGHT	[0] RHIZOCTONIA ORYZAE	[0] STRAIGHTENED
[0] TILLETIA BARCLAYANA	[0] WHITE TIP NEMATODE	[ ] OTHER (Specify)

16. INSECT RESISTANCE (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[0] GRASS HOPPER	[0] LEAF HOPPER	[0] RICE HISPA
[0] RICE MIDGE	[0] STEM BORER	[0] STINK BUG
[0] SWARM CATERPILLAR	[0] WATER WEEVIL	[ ] OTHER (Specify)

17. INDICATE A VARIETY WHICH MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Tillering		Seed Shape	
Lodging		Endosperm Transp.	
Leaf Angle		Milling Quality	
Leaf Color		Cook & Proc. Quality	

18. GIVE THE FOLLOWING AVERAGE DATA FOR SUBMITTED AND A SIMILAR VARIETY

VARIETY	PARBOIL CANNING STABILITY (% Loss)	PROTEIN * (%)	AMYLOSE ** (%)	ALKALI REACTION *** 1.7	ALKALI REACTION *** 2.0	GELATINIZATION TEMPERATURE (°C)
SUBMITTED						
SIMILAR						
NAME OF SIMILAR VARIETY						

*Hulled Rice - Dry Wt. **Milled Rice 11 - 12% Moisture ***Average spreading value in 1.7% and 2.0% KOH Solution.

REFERENCES

1. C. R. Adair et al, 1972. Rice in the United States: Varieties and Production. USDA Handbook No. 289 (Rev.), 124 pp.
2. J. G. Atkins, et al, 1967. An International Set of Rice Varieties for Differentiating Race of Pyricularia Oryzae. Phytopath. 57:297-301.
3. Te-Tzu Chang, 1965. The Morphology and Varietal Characteristics of the Rice Plant. IRRI Los Banos, Philippines Tech. Bulletin 4.
4. K. C. Ling and S. H. Ou, 1969. Standardization of the International Race Numbers of Pyricularia Oryzae. Phytopath. 59:339-342.
5. B. D. Webb et al, 1968. Characteristics of Rice Varieties in the USDA Collection. Crop Sci. 8:361-365.
6. Nickerson's or any recognized color fan may be used to determine plant colors of the described variety.

COMMENTS:

Note: 1. At times, a blue cast is noted--due most probably to the waxy cuticle layer.
2. Cool weather resistance.
3. Tendency to lodge.
4. Short culms.

RRI-105

Exhibit D

Botanical Description

RRI-105 is a glutinous (waxy endosperm) variety. It is classified as a very early maturing variety in California (130 days). There is no similar variety presently grown in California. It has good seedling vigor when seeded in shallow water (2-5 inches). However, seedling rates of 175-190 pounds/acre are recommended to insure seedling density of 20 plants/ft.^{2}.

The grain shape is short (pearl type).

The culm is short (semi-dwarf) and erect with pubescence on culm leaves and grain. The grain is tip awned with the apiculus turning from light to dark brown upon ripening.

The second foliar leaf is short with small angle and is medium green.

The flag leaf is ascending and short.

The panicle is intermediate and droops soon after heading.

The lemma and palea are straw-colored at maturity.

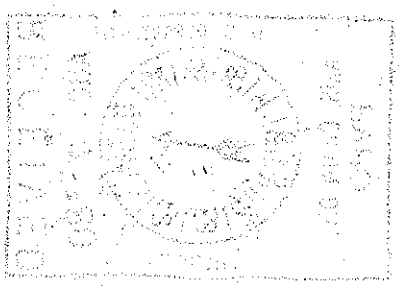
The mature panicle threshes hard when harvested, and often the grains retain a portion of the rachilla.

Table 1. Comparison in height (cm) of Ampec and RRI-105. Data collected from replicated yield plots from 1974 to 1979. Each entry represents the mean of 4 replicated plots. Varieties are significantly different at = .01.

Year	RRI-105	Ampec
1974		112
1975	88	113
1976	88	111
1977	88	111
1978	86	114
1979	87	116

Table 2. Comparison in days to 50% heading of Ampec and RRI-105. Data collected from replicated yield plots from 1974 to 1979. Each entry represents the mean of 4 plots. Varieties are significantly different at = .01.

Year	RRI-105	Ampec
1974		104
1975	85	103
1976	84	106
1977	83	104
1978	75	110
1979	78	113



USDA

United States Department of Agriculture

Research, Education, and Economics
Agricultural Research Service

January 7, 2000

Thomas Salt
Plant Variety Protection Office
NAL Building, Room 500
10301 Baltimore Blvd.
Beltsville, MD 20705-2351

SUBJECT: Expired PVP Applications Transferred to NPGS

Dear Thomas:

We have received notice in the Plant Variety Protection Office Official Journal Quarterly Report of the expiration of the following applications. We have transferred the control of these samples to the NPGS. We have made all necessary changes to our records.

PVP NO.	CULTIVAR	PI NUMBER	CROP	NSSL SERIAL NUMBER
7900103	Columbia	PI 600789	Bluegrass, Kentucky	NSSL 116196.01
8000079	Shasta	PI 600794	Bluegrass, Kentucky	NSSL 117037.01
7900085	RRI-105	PI 600797	Rice	NSSL 117723.01
7900118	Speight G-58	PI 552500	Tobacco	NSSL 117035.02

Thank you for notifying us of this change.

Sincerely,

Judy Grotenhuis

JUDY GROTENHUIS
Data Management Unit

ars

Northern Plains Area • National Seed Storage Laboratory
1111 South Mason Street • Ft. Collins, CO 80521-4500
Voice: 970 495-3200 • Fax: 970 221-1427